# FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

## Note:

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

# READ THIS FIRST

**Notice:**

1. Product design and specifications are subject to change without notice. This includes primary product specifications, software, software drivers, and user's manual. This User Manual is a general reference guide for the product.
2. The product and accessories that come with your camera may be different from those

described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products very often vary between retailers especially with accessories such as batteries, chargers, AC adapters, memory cards, cables, carrying cases/pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.

3. The manufacturer assumes no liability for any errors or discrepancies in this user's manual.
4. For driver updates and revisions to this manual, please refer to our website.

## WARNING

- Do not use the camera if it is emitting smoke, becomes unusually hot to be touched, emitting any unusual odor or noise, or if it is in any other abnormal state. Operating the camera in any of these situations may cause a fire or an electrical shock. Stop using the camera immediately, turn the camera off, and then disconnect the power source (batteries or AC power adapter). If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera. After checking that smoke is no longer being emitted, contact your dealer or a local authorized service facility and request repairs. Never attempt to repair the camera yourself, as this will terminate the warranty.
- Do not use the camera if any foreign objects have entered the camera. Turn the camera off, and disconnect the power source (batteries or AC power adapter). If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera. Then contact your dealer or a local authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.
- If the camera has been dropped or if the camera case has been damaged, turn the camera off, and then disconnect the power source (batteries or AC power adapter).
  If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera. Then contact your dealer or a local authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.
- Do not place the camera in any unstable locations such as on a wobbly table or sloping surface where the camera may fall or tip over and cause injury.
- Do not expose the camera to moisture and make sure that there is no water getting into the camera. Take particular care when using the camera under extreme weather conditions such as rain or snow, or when operating the camera at the beach on near water. Water in

the camera may cause a fire or an electrical shock.

- Do not attempt to modify the camera. This may cause a fire or an electrical shock.
- Do not remove the camera casing. This may cause an electrical shock. Your dealer should only carry out internal inspection, maintenance and repairs or a local authorized service facility.
- Do not touch the power plug during a thunderstorm if you are using the AC power adapter. This may cause an electrical shock.

## CAUTION

- Do not place the camera in damp or dusty locations. This may cause a fire or an electrical shock.
- Do not place the camera in a location affected by oil fumes or steam, such as near a cooking stove or humidifier. This may cause a fire or an electrical shock.
- Do not cover or wrap the camera or the AC power adapter with a cloth or quilt. This may cause heat to build up and distort the case and cause a fire. Always use the camera and its accessories in well-ventilated locations.
- Handle the camera carefully and do not bump the camera into any hard object. Handling the camera roughly may cause a malfunction.
- Do not use batteries other than those specified for use with the camera. The use of unsuitable batteries may result in the batteries splitting or leaking and causing a fire, injury, or soiling of the battery compartment.
- When placing the batteries into the camera, check the polarity markings on the battery (- and +) to ensure that you insert the battery correctly. Incorrect battery polarity may result in the batteries splitting or leaking and causing a fire, injury, or soiling of the battery compartment.
- Remove the batteries if the camera will not be used for an extended period of time. The batteries may leak and cause a fire, injury or soiling of the battery compartment. If the batteries leak, clean and wipe the battery compartment carefully and install new batteries. Wash your hands carefully if you touch the battery fluid.

## CONTENTS

**INTRODUCTION ..... 6**
Overview
Package contents
**GETTING TO KNOW YOUR CAMERA ..... 7-10**
Names of Parts
LCD Monitor Icons
**GETTING STARTED ..... 11-14**
Installing the batteries
Inserting an SD Memory Card (optional accessory)
Attaching the Hand Strap
Setting the Date and Time
Setting Image Resolution and Quality
**RECORD MODE ..... 15-18**
Taking Images
Portrait Mode
Normal Mode
Digital Zoom
Self-Timer
Flash
**PLAYBACK MODE ..... 19-23**
Viewing Images
Zoom Playback
Displaying Thumbnail Images
Slide Show Display
Deleting Images
Setting the DPOF
**MOVIE MODE ..... 23-25**
Recording video clips
Viewing video clips
**TRANSFERRING RECORDED IMAGES AND VIDEOS TO YOUR COMPUTER ..... 25-28**
Step 1: Installing the USB driver
Step 2: Connecting the camera to your computer
Step 3: Downloading images and video clips
**INSTALLING PHOTOSUITE ..... 28**
**INSTALLING PHOTOVISTA ..... 29**
**USING THE CAMERA AS A PC CAMERA ..... 30-32**
Step 1: Installing the PC Camera Driver
Step 2: Connecting the Camera to Your Computer
Step 3: Running Your Application Software
**MENU OPTIONS ..... 32-38**
Record Menu
SETUP MENU
QUICK VIEW
EV & WHITE BALANCE
Movie Menu
Playback Menu
SETUP MENU
SLIDE SHOW

ERASE
COPY TO CARD
DPOF
Setup Menu
LCD BRIGHTNESS
DATE/TIME
LANGUAGE
SOUND
FORMAT MEDIA
VIDEO MODE
AUTO POWER OFF
LIGHT FREQUENCY
FACTORY SETUP
**CONNECTING THE CAMERA TO OTHER DEVICES ..... 38**
**CAMERA SPECIFICATIONS ..... 39**

# INTRODUCTION

## Overview

Your new digital camera delivers high quality, 2560 x 1960 resolution images using a 3.1 Mega pixel sensor. Using the 1.5" TFT color image LCD monitor, you can compose images and then examine them in detail. An auto-flash sensor automatically detects the shooting (lighting) conditions and determines whether the flash should be used. This feature helps ensure that your images turn out right.

16MB internal (built-in) memory lets you capture and store images without the need for an additional memory card. However, you may wish to expand the memory capacity (up to 512MB capacity) by using an external memory card.

In addition to still images, you can record short videos using the movie function.

Images you have taken can be downloaded to your computer using the USB cable (USB driver required for Win 98 and Mac OS 8.6) You can enhance and retouch your images on your computer by using the provided editing software, or image editing software you may already own. You may share your images with your friends via e-mail, in a report, or on a website.

## Package contents

Carefully unpack your camera and ensure that you have the following items:

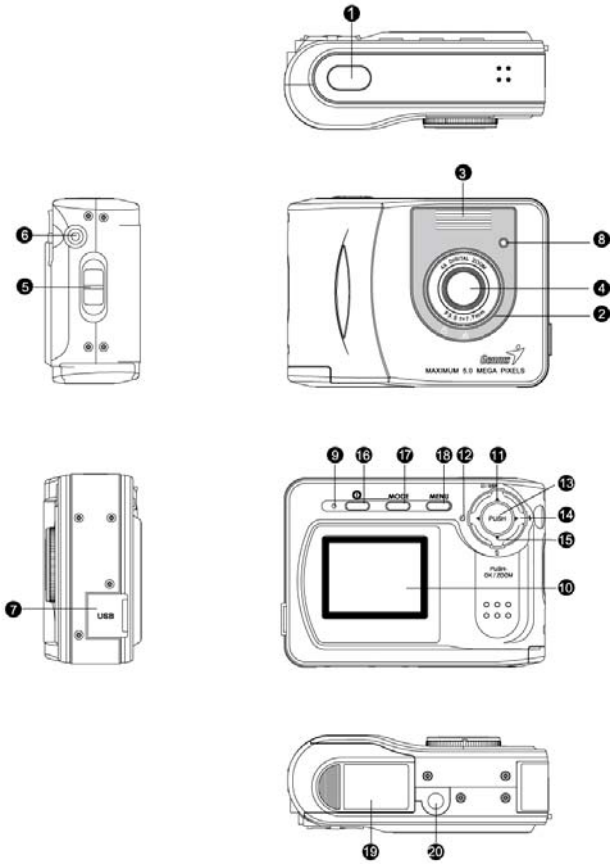
- Digital camera
- USB cable
- Video cable
- Quick guide
- 2 x AA alkaline batteries
- Software CD-ROM
- User's manual
- Camera strap
- Camera pouch
- Camera Tripod

Common (Optional) Accessories:

- SD memory card

***Note:*** Accessories and components vary by retailer.

# GETTING TO KNOW YOUR CAMERA



## Name of Parts

1. Shutter button
2. Focus dial
   - Portrait mode
   - Normal mode
3. Flash
4. Lens
5. Hand strap eyelet
6. VIDEO OUT jack
7. USB connector
8. Self-timer LED
9. LED indicator
10. LCD monitor
11. Arrow button (up)
    - Quality/Resolution button
    - DISP Display button
12. Arrow button (left)
    - Self-timer button
13. OK OK button
    - ZOOM Digital zoom button
14. Arrow button (right)
    - Flash button
15. Arrow button (down)
    - Delete button
16. Power button
17. MODE Mode button
18. MENU Menu button
19. Battery/Memory card cover
20. Tripod socket

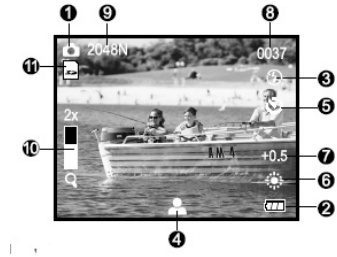
# LCD Monitor Icons

**Display icons - Still Image Record Mode:**

1. Record mode
2. Battery level
   - Full battery power
   - Medium battery power
   - Low battery power
   - Virtually no battery power
3. Flash mode
   - Auto flash
   - Red-eye reduction
   - Flash off
4. Focus mode

   [no indication] Normal mode
   - Portrait mode
5. Self-timer mode
6. White balance

   [no indication] Auto
   - Tungsten
   - Fluorescent 1
   - Fluorescent 2
   - Cloudy
   - Daylight
7. EV compensation (no indication with 0EV)
8. Possible number of shots remaining (at the current size and quality settings)
9. Image size & resolution




10. Digital zoom
11. Memory card indicator
    - SD memory card
    - MultiMediaCard (MMC)

### Display icons - Movie Mode:

1. Movie mode
2. Battery level
3. Recordable movie time available
4. Memory card indicator
5. EV compensation
6. White balance
7. Recording indicator (blinking)

### Display icons - Still-Image Playback Mode:

1. Playback mode
2. Battery level
3. Frame number
4. Memory card indicator

### Display icons - Video (movie) Playback Mode:

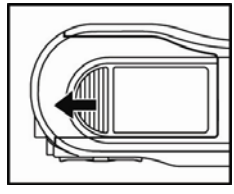
1. Playback mode
2. Battery level
3. Frame number
4. Recorded movie time
5. The first frame of the movie
6. Memory card indicator

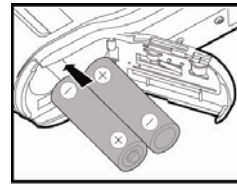
# GETTING STARTED

You can use 2 AA size batteries (Alkaline, Ni-MH) to power the camera.

## Installing Batteries

1. Make sure the camera is off.
2. Slide the battery/SD card cover in the direction of the [OPEN] arrow.
3. Insert the batteries according to the correct polarity marks (+ or -).
4. Close the battery/SD card cover firmly.



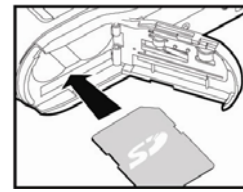


### NOTE

- If you will not be using the batteries for an extended period of time, remove them from the camera to prevent leakage or corrosion.
- Never use manganese batteries.
- Never use batteries of different types (together) or mix old and new batteries.
- Avoid using batteries in extremely cold environments as low temperatures can shorten the battery life and reduce camera performance.
- When the icon appears on the LCD monitor, the LED indicator will blink for 5 seconds and then the camera will automatically power off. Replace the exhausted batteries with a new set of batteries.

## Inserting an SD memory card (optional accessory)

The camera comes with 16MB of internal memory, allowing you to store images and video clips in the camera. However, you can expand the memory capacity by using the SD (Secure Digital) memory card so that you can store additional images and video clips.



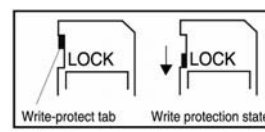
1. Make sure the camera is turned off.
2. Slide the battery/SD card cover in the direction of the [OPEN] arrow.
3. Insert the SD memory card.
   - The front side of the memory card (printed arrow) should face towards the front side of the camera.
   - If the card cannot be inserted, check the orientation.
   - This camera is also compatible with the MultiMediaCard™.
4. Close the battery/SD card cover.

**To remove a memory card:**

Make sure the camera is turned off. Open the battery/memory card cover. Press lightly on the edge of the memory card and it will eject.

### NOTE

- To prevent valuable data from being accidentally erased from an SD memory card you can slide the write-protected tab (on the side of the SD memory card) to “LOCK”.
- To save, edit, or erase data on an SD memory card, you must unlock the card.

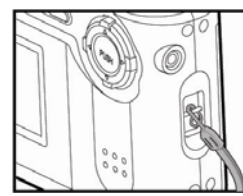



## Attaching the Hand Strap

To prevent accidental slippage during use, always use the strap.

Attach the camera strap as follows:

1. Thread the small loop of the hand strap through the hand strap eyelet on the camera.



2. Pull the large loop through the small loop until the strap is firmly secured

## Setting the Date and Time

The Date/Time screen will be presented if/when:

- Camera is turned on for the first time.
- Camera is turned on after leaving the camera without batteries for an extended period of time.

When the DATE/TIME screen appears, follow these steps to set the correct date and time.

Select the year, month, day, and time fields by using the ▲ / ▼ button.

Press the **OK** button after all fields are set.

- To increase the value, press the ▶ button.
- To decrease the value, press the ◀ button.

## Setting Image Resolution and Quality

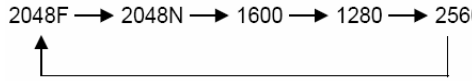
Resolution and quality settings determine the pixel size (dimension), image file size, and compression ratio for your image. These settings affect the number of images that can be stored in internal memory, or on an SD memory card. As you get to know the camera, it is recommended that you try each quality and resolution setting to get an appreciation for the effects that these settings will have on your images.

Higher resolution and higher quality images offer the best photographic results but produce large files sizes. Therefore, few images will take up a lot of memory space.

High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

To change image resolution or image quality, perform the steps below:

1. Power on the camera. (If already on, toggle the **MODE** button to the mode.)
2. Toggle the button to select the image size or image quality you prefer.




The table below shows the approximate number of shots that you can take at each setting based on 16MB internal memory or using an optional memory card from 8MB to 512MB SD.

| Camera Mode | Resolution | Quality | 16MB Internal Memory | SD Memory Card | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 8MB | 16MB | 32MB | 64MB | 128MB | 256MB | 512MB |
| Still Image | **2048** 2048x1536 pixels | **F** | 15 | 6 | 14 | 30 | 63 | 129 | 259 | 523 |
| | | **N** | 30 | 12 | 28 | 61 | 127 | 259 | 518 | 1046 |
| | **1600** 1600x1200 pixels | - | 42 | 17 | 40 | 87 | 180 | 366 | 732 | 1478 |
| | **1280** 1280x960 pixels | - | 84 | 34 | 80 | 173 | 358 | 729 | 1456 | 2939 |
| | **2560** 2560x1960 pixels | - | 18 | 7 | 18 | 38 | 79 | 162 | 325 | 656 |
| Video Clip | 320x240 pixels | - | 1:35 | 0:39 | 1:30 | 3:13 | 6:40 | 13:33 | 27:19 | 55:49 |

* The above data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

# RECORD MODE

## Taking Images

Your camera is equipped with a 1.5" LCD monitor to compose images.

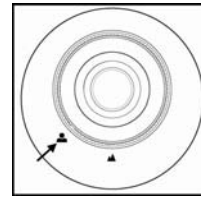
1. Turn the camera on by pressing the power button. (The camera will always power-up in still-image record mode.)
2. If not in record mode, toggle the **MODE** button to the mode.
3. Compose your shot on the display screen.
4. Press the shutter button.

**NOTE**

- The LCD monitor does not work well under direct sunlight and bright light.

## Portrait Mode

Taking pictures by selecting the portrait mode will produce an image with a sharp subject and indistinct background. The effective range of focus is between 0.7 meters and 1.4 meters.



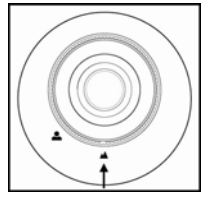
1. Power on the camera. Make sure the camera is in Record mode.
2. Set the focus dial located on the front side of the camera to the position.
   - The icon appears on the LCD monitor.
3. Compose your scene.
4. Press the shutter button.

**NOTE**

- The flash mode is disabled in the portrait mode.

## Normal Mode

The normal mode, suitable for scenery shooting, is used when the distance to the subject is greater than 1.4 meters.



1. Power on the camera. Make sure the camera is in Record mode.
2. Set the focus dial located on the front side of the camera to the position.
3. Compose your scene.
4. Press the shutter button.

## Digital Zoom

Using digital zoom, images appear closer. Whereas digital zoom is a compelling feature, the more an image is enlarged (zoomed), the more pixilated (grainier) the image will appear.

1. Power on the camera. Make sure the camera is in Record mode.
2. Press the **OK** button to activate the digital zoom function.
   - The zoom bar and magnifier icon appear on the LCD monitor.
   - Press the button to magnify up to 4X.
   - Press the button to reduce the magnification level.
3. Press the **OK** button to cancel the digital zoom function.
4. Press the shutter button to capture a "zoomed" image.

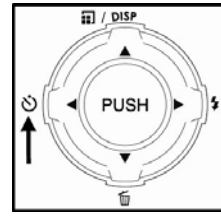
### NOTE

- The more the image is enlarged, the more pixilated (grainier) the image.

## Self-Timer

The self-timer duration is ten seconds. Activate the self-timer by pressing the shutter button. The self-timer LED blinks slowly for seven seconds and then blinks rapidly for the last three seconds. This allows you to get into the scene when taking group images.

1. Secure the camera to a tripod or place it on a stable surface.
2. Power on the camera. Make sure the camera is in Record mode.
3. Press the button.
   - The icon appears on the LCD monitor.
4. Compose the scene.
5. Press the shutter button.
   - The self-timer function is activated.
6. After ten seconds, the camera takes an image.
   - To cancel the self-timer at any time, press the shutter button to disrupt the sequence.

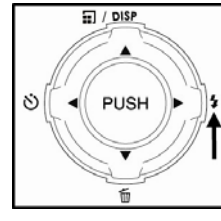



### NOTE

- After an image is taken using self-timer, the self-timer mode is turned off.
- If you wish to take another image using the self-timer, repeat these steps.

## Flash

The flash is designed to function automatically when lighting conditions warrant the use of flash. You can take an image using a flash mode suitable to your circumstances.
If you change the flash mode, the camera will retain that setting even if the camera is turned off.



1. Power on the camera. Make sure the camera is in Record mode.
2. Press the button repeatedly until the desired flash mode appears.
3. Compose the image and press the shutter button.

## NOTE

- If you will not be using the flash, turn it off. Turning the flash OFF will result in faster camera startup and faster operation because the capacitor will not be charged needlessly. Turning the flash OFF when not needed, will also improve battery life. Flash mode is disabled during portrait mode to avoid over-exposed photos.

The camera has three flash modes: Automatic Flash (default), Red-Eye Reduction and Flash Off. The modes appear, cyclically, when you press the button. The table below will help you choose the appropriate flash mode:

| Flash mode | Description |
|---|---|
| Auto flash | The flash fires automatically according to the ambient lighting conditions. Select this mode for general flash photography. |
| Red-eye reduction | The flash emits a precursor-flash before the main flash fires. This Red-eye reduction causes the pupil in the human eye to constrict, reducing the red-eye phenomenon. Select this mode when taking images of people and animals in low-light conditions. |
| Flash off | Flash off The flash will not fire. Select this mode when taking images in a place where flash photography is prohibited, or when the distance to the subject is beyond the effective range of the flash. |

## NOTE

- The Flash mode is disabled in Portrait mode.

# PLAYBACK MODE

In ▶ mode, you can view, magnify, delete images, play video clips, or run a slide show. Playback mode also provides a thumbnail image display, allowing you to quickly scan for the image you want.

## Viewing Images

1. Power on the camera and toggle the button to the ▶ mode.
2. View your images using the ◀ / ▶ button.
   - To view the previous image, press the ◀ button.
   - To view the next image, press the ▶ button.
   - Press the button (same as the ▲ / ▦ button) once to display the detailed image information such as image quality & size, time and date.

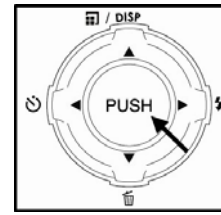
### NOTE

- If there are no images stored in memory, the "NO IMAGE" message will appear on the LCD monitor.
- You can also view your images on the TV screen. First connect one end of the video cable to the VIDEO OUT jack of the camera. Then connect the other end to the video input jack of the TV. Toggle the MODE button to the ▶ mode and then the TV and camera on.

## Zoom Playback

While reviewing your images, you may enlarge a selected portion of an image. This magnification allows you to view fine details.

1. Power on the camera, and toggle the **MODE** button to the ▶ mode.
2. Select the image that you want to view using the ◀ / ▶ button.
3. Enlarge the image by pressing the **ZOOM** button (the **OK** button).
   - Pressing the **ZOOM** button once magnifies the image to 2X.
   - Pressing it again magnifies the image to 3X → 4X.
4. To view the different portion of the enlarged image, press the ▲ / ▼ / ◀ / ▶ button.
5. To return to the regular display (cancel playback zoom) from **4X**-enlarged status, press the **ZOOM** button again.



## Displaying Thumbnail Images

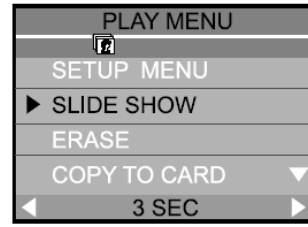
This function allows you to view nine thumbnail images on the LCD monitor simultaneously so that you can quickly scan for a particular image.

1. Power on the camera, and toggle the **MODE** button to the ▶ mode.
2. Toggle the **DISP** button until the thumbnail screen appears.

- Nine thumbnail images appear on the LCD monitor (assuming there are nine or more images in memory).
- To view a full-size image, selecting it by using the ▲ / ▼ / ◀ / ▶ button, and then press the **OK** button and the selected image will be displayed in the full LCD frame.

## Slide Show Display

The slideshow function enables you to playback your images back automatically in sequential order as a slide show. This is a very useful and entertaining feature for reviewing recorded images and for presentations.




1. Power on the camera, and toggle the **MODE** button to the ▶ mode.
2. Press the button and move to **SLIDE SHOW** by using the ▲ / ▼ button.
3. Set the playback interval by using the ◀ / ▶ button and press the **OK** button.
   - The slideshow starts, displaying your images on the LCD monitor, one by one, at the set interval.
   - To stop the slideshow display, press the **OK** button.

### NOTE

- You can adjust the slideshow display interval from 1 to 9 seconds ([1 SEC], [3 SEC], [5 SEC], [7 SEC], [9 SEC]).

## Deleting Images

You can delete an image or video clip or all images and video clips at once by using the Erase function in the Playback menu.

### To delete one image or video clip:

1. Press the **MENU** button and move to **ERASE** by using the ▲ / ▼ button.
2. Select **ERASE ONE** by using the ◀ / ▶ button and press the **OK** button.
3. When the delete message appears, select the image/video clip you wish to delete by using the ◀ / ▶ button. To delete the selected

image/video clip, use the ▲ button to select [YES], and press the **OK** button.

- The next image/video clip appears.
- To cancel the deletion, select [NO] and press the **OK** button. It will return to the playback mode.

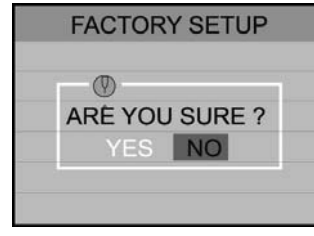
4. Continue deletions, as desired. If all images are deleted, the "NO IMAGE" message will be displayed.

### NOTE

- In the 📷 / ▶ / 🎥 mode, you can also delete one image or video clip by pressing the 🗑 button (same as the ▼ button).

### To delete all images or video clips (at once):

1. Press the button and move to **ERASE** by using the ▲ / ▼ button.
2. Select **ERASE ALL** by using the ◀ / ▶ button and press the **OK** button.
   ERASE ALL menu appears on the screen.
3. Select [YES] by using the ◀ / ▶ button and press the **OK** button to delete all images.
   The "NO IMAGE" message appears because all images and video clips have been deleted.
   To exit from this screen, press either **MODE** the or **MENU** button.




### NOTE

- To delete images or videos stored in internal memory, do not insert a memory card into the camera. Otherwise, you will delete the images or video clips stored on the memory card.

## Setting the DPOF

DPOF is a standard for recording printing information directly on the SD memory cards and other

media. Files saved in the DPOF format can be printed using compatible printers or through a laboratory printing device.

1. Press the **MENU** button and move to **DPOF** by using the ▼ button and press the **OK** button.
2. You can select the desired **DPOF** sub-menu by using the ◀ / ▶ button, and press the **OK** button to confirm the setting.
   - **ONE BY ONE**: Set image quantity on the selected image.
     - ✧ Select the image by using the ◀ / ▶ button.
     - ✧ Set the desired quantity (0: Disable, 1~9: Enable) by using the ▲ / ▼ button, and press the **OK** button.
   - **ALL 1 PCS**: Set image quantity as 1.
   - **DELETE ALL**: Delete all DPOF settings (Quantity:0).

3. To exit from the menu mode at anytime, press the **MENU** button again or press the **MODE** button.

**NOTE**

- This function can be used only on still image files that are saved on memory cards.

# MOVIE MODE

## Recording Video Clips

The movie mode allows you to record video clips at a resolution of 320 x 240 pixels.

1. Power on the camera, and toggle the button to the 🎥 mode.
   - The amount of time available for movie

recording is displayed on the LCD monitor. (The time format is Minutes: Seconds)

2. To start recording a video clip press (and release) the shutter button.
   - The elapsed time is displayed and the recording indicator ( ● ) blinks on the LCD monitor while recording.
   - To stop recording, press the shutter button again.

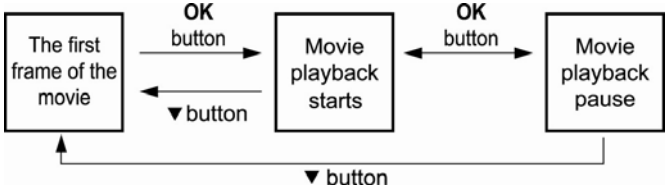
**NOTE**

- Resolution is always 320 x 240 and image quality cannot be specified.
- The self-timer cannot be adjusted used.
- The flash mode is disabled.

## Viewing Video Clips

To view the recorded video clips, follow the steps below.

1. Power on the camera, and toggle the **MODE** button to the ▶ mode.
2. Select the video clip you wish to view using the ◀ / ▶ button.
3. Press the **OK** button to start.
   - To pause playback at any time, press the **OK** button.
     - ✧ Press the **OK** button again to resume playback.
   - To exit this movie playback and return to the playback mode, press the ▼ button.




**NOTE**

- The zoom function cannot be activated during movie playback.
- To play the video clip back on your computer, you may use either Windows Media Player or Apple "QuickTime Player".
- QuickTime basic player is available free of charge, compatible with both Mac- and Windows

computers and can be download from the Apple web site at **www.apple.com.** For help using QuickTime Player usage, please refer to the QuickTime on-line help for more information.

# TRANSFERRING RECORDED IMAGES TO YOUR COMPUTER

To transfer images/video clips from the camera to your computer, follow these steps:

Step 1: Installing the USB driver (Windows 98 and Mac OS 8.6 users only)
Step 2: Connecting the camera to your computer
Step 3: Downloading image and video files

## System Requirements (Windows)

- Pentium 200 MHz or higher
- Windows 98/98SE/Me/2000/XP
- 64MB RAM
- 128MB hard disk space
- CD-ROM drive
- Available USB port

## System Requirements (Macintosh)

- PowerPC G3/G4
- OS 8.6 or later
- 64MB RAM
- 128MB hard disk space
- CD-ROM drive
- Available USB port

## Step 1: Installing the USB driver

**Windows 98 computers**

The USB driver on the CD-ROM is exclusively for Windows 98 computers. Installing the USB driver on computers running Windows 2000/ME/XP is not necessary.

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**USB DRIVER**". Follow the on-screen instructions to complete the installation. After the USB driver has been installed, restart your computer.

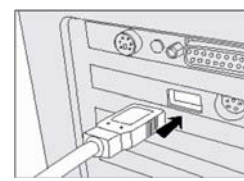
**Macintosh OS 8.6 computers**

Mac OS 8.6 users must install a USB driver. For Mac OS 9.0 or higher, the computer will automatically recognize the camera and load its own USB drivers.

1. Insert the CD-ROM that came with the camera into the CD-ROM drive.
2. Select and double-click "Digital Camera Driver Installer ".
3. Select "Install Location" and click "Install".
4. Follow the on-screen instructions to complete the installation and restart your computer.

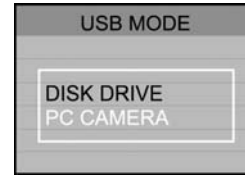
## Step 2: Connecting the camera to your computer

1. Connect one end of the USB cable to an available USB port on your computer.
2. Connect the other end of the USB cable to the USB connector on the camera.
3. The USB MODE menu appears on the screen.
4. Use the ▲ / ▼ button to select **DISK DRIVE**, and press the **OK** button.
   - DISK DRIVE is displayed on the LCD monitor.
5. From the Windows desktop, double click on "My



Computer"

6. Look for a new "removable disk" icon. This "removable disk" is actually the memory (or memory card) in your camera. Typically, the camera will be assigned drive letter "e" or higher.
7. Double click on the removable disk and locate the DCIM folder.
8. Double click on the DCIM folder to open it to find more folders.
   - Your recorded images and video clips will be inside these folders.
   - Copy & Paste or Drag-N-Drop image and video files to a folder on your computer.




**Mac users:** Double-click the "untitled" disk drive icon on our desktop. iPhoto may automatically launch. The volume label may vary depending upon whether you use internal camera memory, or a memory card.

**NOTE**

- When transferring images to the computer, there is no need to install any batteries into the camera. The camera will automatically power on when connected to the computer via USB cable.

## Step 3: Downloading Images/Video clips

When the camera is turned on and connected to your computer, it is considered as a disk drive, just like a floppy disk or CD. You can download (transfer) images/video clips by copying them from the “removable disk” (“untitled” disk on a Macintosh) to your computer hard drive or to another kind of disk.

### Windows-

Open the "removable disk" and subsequent folders by double clicking on them. Your images are inside these folder(s). Select the images that you want, then choose "Copy" from the "Edit" menu. Open the destination location (folder) and choose "Paste" from the "Edit" menu. You may also

drag and drop image files from the camera to a desired location.

### Macintosh-

Open the “untitled” disk window and the hard disk or the destination location. Drag and drop from the camera disk to the desired destination.

**NOTE**

- Memory card users may prefer to use a memory card reader (highly recommended).

# INSTALLING PHOTOSUITE

PhotoSuite is a very user-friendly image-editing program. With PhotoSuite, you can easily retouch, compose and organize your images. It contains a variety of templates, such as photo frames, birthday cards, calendars and more. Get your images ready and go explore this amazing program.

To install PhotoSuite

1. Inset the CD-ROM packaged with the camera in to the CD-ROM drive. The welcome screen appears.
2. Click "Install PhotoSuite". Follow the on-screen instructions to complete the installation.

**NOTE**

- For information on how to use PhotoSuite to edit and retouch your recorded images, please refer to its online help.
- For Windows 2000/XP users, make sure to install and use the PhotoSuite while logged in as a user with an Administrator account.
- PhotoSuite is not supported on the Mac. iPhoto or iPhoto2 is recommended.

# INSTALLING PHOTOVISTA

PhotoVista is an easy-to-use program that lets you create spectacular $360^0$ panoramic images in a snap. When you view these panoramas, you get the experience of being totally immersed in a realistic environment. PhotoVista's powerful engine quickly and automatically stitches images together, and its intuitive interface will let even a novice get great results in minutes.

To install PhotoVista:

1. Insert the CD-ROM packaged with the camera into the CD-ROM drive. The welcome screen appears.
2. Click "Install PhotoVista". Follow the on-screen instructions to complete the installation.

## NOTE

- For information on how to use PhotoVista to create spectacular $360^0$ panoramic images, please refer to its online help.
- For Windows 2000/XP users, make sure to install and use the PhotoVista while logged in as a user with an Administrator account.
- PhotoVista is not supported on the Mac.
- Windows XP users who have not installed XP Service Pack 1, be sure to link to **http:java.sun.com/getjava/download.html** first and download the Java Virtual Machine installation. For more information about Java, please refer to its on-line help at **http://java.sun.com/getjava/help.html** After this Java installation, you can install iSee Media PhotoVista.
- PhotoVista System Requirements are:
  * Windows 98, Windows NT 4 (Service Pack 3 or higher)
  * Windows 2000, Windows Me, Windows XP Service Pack 1 or higher

# USING THE CAMERA AS A PC CAMERA

Your camera can act as a PC camera, which allows you to videoconference with business associates, or have a real-time conversation with friends or family.

To use the camera as a PC camera, follow these steps:
Step 1: Installing the PC camera driver (same as USB driver)
Step 2: Connecting the camera to your computer
Step 3: Running your application software (i.e. Windows NetMeeting)

**NOTE**

- Video conferencing (or video editing) software is not included with the camera.
- This mode is not supported for Mac.

## General System Requirements for Videoconferencing

To use the camera for videoconferencing, your computer system must include:

- Microphone
- Sound card
- Speakers or headphones
- Network or Internet connection

## Step1: Installing the PC Camera Driver

The PC-camera driver included on the CD-ROM is exclusively for Windows. The PC camera function is not supported for Mac platforms.

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**USB DRIVER**". Follow the on-screen instructions to complete the installation. After the driver installation is completed, restart your computer.

**NOTE**

- The USB driver that bundled inside the CD-ROM is designed in a form 2 in 1 (USB & PC camera driver).
  a) On Windows 98, the Windows OS will install both USB & PC camera drivers.
  b) On Windows 2000/ME/XP, it will only install PC camera driver.

## Step2: Connecting the Camera to Your Computer

1. Connect one end of the USB cable to an available USB port on your computer.
2. Connect the other end of the USB cable to the USB connector on the camera.
3. The USB MODE menu appears on the screen.
4. Use the ▲ / ▼ button to select PC CAMERA, and press the **OK** button. PC CAMERA is displayed on the LCD monitor.
5. Position the camera steadily on top of your computer monitor or use a tripod.

### NOTE

- When using this camera as a PC camera, there is no need to install any batteries into the camera. The camera will automatically power on when connected to the computer via USB cable.

## Step3: Running Your Application Software ( i.e. Windows NetMeeting)

To use Windows NetMeeting for videoconferencing:

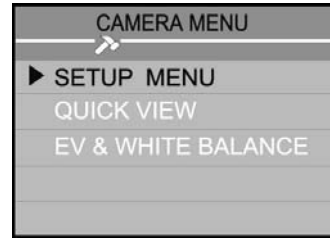
1. Go to **Start** → **Programs** → **Accessories** → **Communications** → **NetMeeting** to launch the NetMeeting program.
2. Click the **Start Video** button to view live video.
3. Click the **Place Call** button.
4. Type the e-mail address or the network address of the computer that you are calling.
5. Click **Call**. The person that you are calling must also have Windows NetMeeting running and be willing accept your call to start the videoconference.

### NOTE

- The video resolution for videoconferencing applications is generally 320 x 240.
- For more information about the operation of videoconference application software, refer to its respective help documentation.

# MENU OPTIONS

You can use the Record menu to adjust exposure and white balance. The Record menu even allows you to enable quick view. You can also access the Setup menu in the Record menu. To access the Record menu, toggle the **MODE** button to the mode and press the **MENU** button. Scroll through the menu options by using the ▲ / ▼ button.




## SETUP MENU

Press the **OK** button to access the Setup Menu. For more information about Setup Menu, refer to the Setup menu section.

## QUICK VIEW

You can view each captured image on the LCD monitor immediately after capture by enabling Quick View. Each captured image will be displayed briefly, after which the camera returns to the mode automatically. To enable quick view, select [ON] by pressing the ◀ / ▶ button, and then press the **OK** button.

## EV & WHITE BALANCE

### Exposure (EV)

Your camera adjusts the exposure of each scene automatically. However, if the subject is very

dark, or very bright, you may override the camera's automatic exposure determination to make the subject brighter or darker. This is called EV compensation.

The EV compensation can be adjusted from -2.0EV to +2.0EV.

To select the EV compensation you wish, press the **OK** button. Then, use the ▲ / ▼ button to select the EV compensation you desire, and press the **OK** button.

### Examples of Exposure Compensation -

**Positive (+) Compensation**

- Imaging printed text (black characters on white paper)
- Portraiture with back lighting
- Very bright scenes (such as snow) and highly reflective subjects
- Shots made up predominantly of sky

**Negative (-) Compensation**

- Spot lighted subjects, particularly against dark backgrounds
- Imaging of printed text (white characters on black paper)
- Scenes with low reflectivity, such as shots of green or dark foliage

## White Balance

Your camera adjusts the white balance of each scene automatically. However, the images that your camera captures will appear different under different lighting conditions (daylight, cloudy, fluorescent, tungsten lights). Unlike your eyes, which can easily adjust to different lighting conditions (lighting temperatures), a digital camera cannot always differentiate between lighting types. Under some lighting conditions the image may appear in strange shades. If that occurs you may change the white balance setting by specifying a lighting condition (temperature) most appropriate for your scene.

To set the white balance, press the **OK** button. Then select the appropriate white balance by using the ◀ / ▶ button, and press the **OK** button.

: Camera automatically adjusts white balance

: For tungsten lighting

: For reddish fluorescent lighting

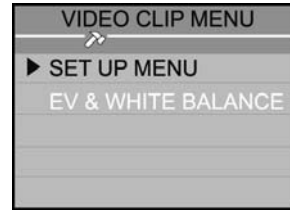
: For bluish fluorescent lighting

: For cloudy and shady sky

: For outdoors on a bright day

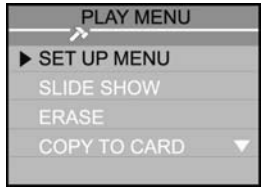
## Movie Menu

To adjust movie settings, press the **MENU** button in the mode and navigate to the option you wish to set by using the ▲ / ▼ button. For more information about Exposure (EV) and White balance, refer to the Record menu section. And for more information about Setup Menu, refer to the Setup menu section.




## Playback Menu

Use the playback menu to create an on-camera slide show or transfer images from internal memory to a memory card. You can also use the Playback menu to delete one or all images. To access the playback menu, press the **MENU** button in the mode and navigate through the options by using the ▲ / ▼ button.



### SETUP MENU

Press the **OK** button to access the Setup Menu. For more information about Setup Menu, refer to the Setup menu section.

### SLIDE SHOW

Refer to section in this manual titled "Slideshow Display" in the PLAYBACK MODE for further details.

### ERASE

Refer to section in this manual titled "Deleting Images" in the PLAYBACK MODE for further details.

### COPY TO CARD

This feature allows you to copy your images from the camera's internal memory to a memory card. Of course, you can only do this if you have a memory card installed and some images in internal memory.

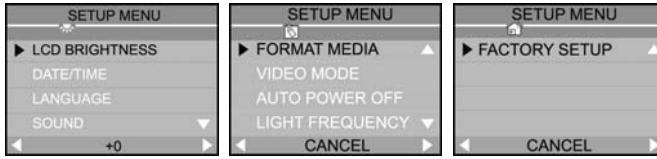
To perform this function, use the ◀ / ▶ button to select [COPY] and then press the **OK** button.

### DPOF

Refer to section in this manual titled "Setting the DPOF" in the PLAYBACK MODE for further details.

## Setup Menu

Select your general camera preferences in the Setup mode. Navigate to the option you wish to configure by using the ▲ / ▼ button.




## LCD BRIGHTNESS

This option adjusts the brightness of the LCD monitor.

To adjust the LCD brightness, you may increase or decrease the LCD brightness by using the ◀ / ▶ button.

## DATE/TIME

After removing the batteries from the camera, the date and time may return to the default settings. If this happens, reset the date and time when using the camera. Refer to section in this manual titled "Setting the Date and Time" for further details.

## LANGUAGE

This option allows you to select the language for the menus and the text displayed on the LCD monitor.

Select the desired OSD language by using the ◀ / ▶ button.

Refer to "Setting DPOF" in Playback Mode.

## SOUND

The camera produces a sound (beep) each time you press a camera button, if this function is enabled.

Select [ON] or [OFF] by using the ◀ / ▶ button.

## FORMAT MEDIA

This utility formats the internal memory (or memory card) and erases all stored images and data.
To perform the format function, select [FORMAT] by using the ◀ / ▶ button and press the **OK** button.
The FORMAT MEDIA menu appears on the screen.
Formatting is an irreversible action and data can not be recovered at a later time.
Select [YES] by using the ◀ / ▶ button and press the **OK** button.

## VIDEO MODE

This utility sets the video output format for displaying recorded images on a television.
Select [NTSC] or [PAL] by using the ◀ / ▶ button.

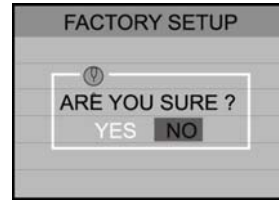
## AUTO POWER OFF

If there is no camera activity (no buttons are pressed) for a defined period of time while the camera is powered on, the camera will eventually turn itself off to conserve power.
You can change the power saving interval by pressing the ◀ / ▶ button to select the desired interval time.
[I MIN], [3 MIN], [5 MIN], [10 MIN], [OFF]

## LIGHT FREQUENCY

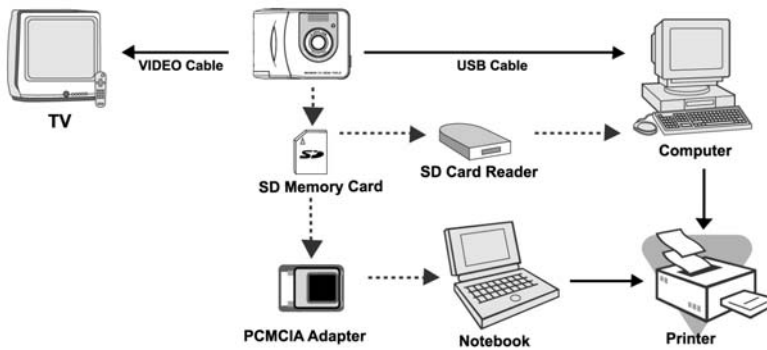
This camera supports different lighting frequencies: 50Hz and 60Hz. When photographing under fluorescent lighting, select the correct frequency setting depending on your local area's voltage.
This function is only effective if you set the White Balance to or (Fluorescent) setting.
Select [50HZ] or [60HZ] by using the ◀ / ▶ button.

### FACTORY SETUP




If you wish to restore all camera settings to their original status, select [SETUP] by using the ◀ / ▶ button and then press the **OK** button.
The FACTORY SETUP menu appears on the screen. Select [YES] by using the ◀ / ▶ button and then press the **OK** button.

# CONNECTING THE CAMERA TO OTHER DEVICES



# CAMERA SPECIFICATIONS

| Item | Description |
|---|---|
| Sensor | Approx. 3.1 Mega pixels |
| Image resolution | 2560: 2560 x 1960 pixels (F/W interpolation to 5 Mega pixels)<br>2048(F/N): 2048 x 1536 pixels<br>1600: 1600 x 1200 pixels<br>1280: 1280 x 960 pixels |
| LCD | 1.5" color TFT LCD |
| Self-timer | 10-second delay |
| Zoom | 4X digital zoom |
| Capture modes | Still Image, Video (movie) recording |
| Memory type | 16 MB internal memory (common)<br>SD memory card, MMC (optional, up to 512MB capacity) |
| Lens | Fixed focal length: 7.7 mm<br>F-number: 3.5 |
| Range of Focus | Normal: 1.4 meters to infinity<br>Portrait: 0.7 to 1.4 meters |
| Exposure and Compensation | Automatic exposure with manual EV compensation +/- 2.0EV in 0.5EV steps |
| White balance | Automatic with presets for Tungsten, Fluorescent1, Fluorescent2,<br>Cloudy, Daylight |
| Shutter Speed | 1/15~ 1/1000 sec. |
| Files formats | JPEG, AVI (Motion JPEG) for video clip |
| File standards | JPEG, EXIF 2.1, DPOF 1.0, DCF 1.1, M-JPEG |
| Interface (Ports) | VIDEO OUT jack, USB connector |
| Power | 2 x AA Alkaline (1.5V) batteries,<br>2 x AA Ni-MH (1.5V) batteries, |
| Dimensions | 83.5 x 60 x 31.5 mm (W x H x D) (exclusive of protruding features) |
| Weight | Approx. 110g(without batteries and the SD memory card) |

*Design and specifications are subject to change without notice.